

In the Claims

The following listing of claims will replace all prior versions and listings of the claims in the present application. Upon entry of the present amendments, the claims will stand as follows:

Please cancel claims 1-4, 6, and 16-22 without prejudice.

Please amend claims 5, 7, 8 and 9 as set forth below.

Claims 1-4. (Cancelled)

5. (Currently Amended) An isolated polynucleotide encoding a polypeptide characterized as:

- (a) specifically interacting with a chK1 protein;
- (b) having SQ/TQ motifs,
- (c) having an isoelectric point of about 4.5;
- (d) having at least one nuclear localization signal; and
- (e) having an amino acid sequence as set forth in SEQ ID NO: 2 ~~or SEQ ID NO: 4~~.

Claim 6. (Cancelled)

7. (Currently Amended) An isolated polynucleotide selected from the group consisting of:

- (a) a polynucleotide encoding a polypeptide having an amino acid sequence as set forth in SEQ ID NO:2 ~~or SEQ ID NO:4~~;
- (b) a polynucleotide of (a), wherein T can be U;
- (c) a polynucleotide complementary to (a) or (b);
- (d) a polynucleotide having a nucleotide sequence as set forth in SEQ ID NO:1 ~~or SEQ ID NO:3~~; and
- (e) degenerate variants of (a), (b), (c) or (d).

8. (Currently Amended) An isolated polynucleotide fragment having at least a 15 continuous base[[s]] segment of and that specifically hybridizes under highly stringent conditions to a polynucleotide selected from the group consisting of:

- (a) a polynucleotide encoding a polypeptide having an amino acid sequence as set forth in SEQ ID NO:2 ~~or SEQ ID NO:4~~;
- (b) a polynucleotide of (a), wherein T can be U;
- (c) a polynucleotide complementary to (a) or (b); and
- ~~(d) a polynucleotide having a nucleotide sequence as set forth in SEQ ID NO:1; and~~
([[e]]d) degenerate variants of (a), (b), or (c) ~~or (d)~~

9. (Currently Amended) An isolated polynucleotide ~~comprising~~ consisting of:

- ~~(a) a polynucleotide as set forth in nucleic acid residues 1-331, 799-903, 1232-1543, 2147-2486 or 2964-4756 of SEQ ID NO:3;~~
- ([[b]]a) a polynucleotide of (a), wherein T can be U;
- ([[c]]b) a polynucleotide complementary to (a) or (b);
- ([[d]]c) a polynucleotide having a nucleotide sequence as set forth in SEQ ID NO:1 ~~or SEQ ID NO:3~~; and
- ([[e]]d) degenerate variants of (a), (b), or (c) or (d).

10. (Previously Presented) An isolated polynucleotide, wherein said polynucleotide comprises:

- (a) a polynucleotide having a nucleic acid sequence set forth in SEQ ID NO:5; or
- (b) a polynucleotide complementary to (a).

11. (Original) An expression vector comprising a polynucleotide of claim 8.

12. (Previously Presented) The expression vector of claim 11, wherein the vector is a viral vector.

13. (Previously Presented) The expression vector of claim 11, wherein the vector is a plasmid vector.

14. (Original) A host cell comprising a vector of claim 11.

15. (Original) A method for producing a polypeptide comprising the steps of:

- (a) culturing a host cell of claim 14 under conditions suitable for the expression of the polypeptide; and
- (b) recovering the polypeptide from the host cell culture.

Claims 16-22. (Cancelled)

Please add the following new claims 23-26:

23. (New) The isolated polynucleotide of claim 5, wherein the polynucleotide further encodes an amino acid sequence consisting of an amino acid sequence as set forth in SEQ ID NO:4.

24. (New) The isolated polynucleotide fragment of claim 8, wherein the fragment further consists of a 15 continuous base segment of and that specifically hybridizes under highly stringent conditions to a polynucleotide encoding a polypeptide consisting of an amino acid sequence as set forth in SEQ ID NO:4.

25. (New) The isolated polynucleotide of claim 7, wherein the polynucleotide encodes a polypeptide consisting of an amino acid sequence as set forth in SEQ ID NO:4.

26. (New) The isolated polynucleotide of claim 9, wherein the polynucleotide consists of:
a polynucleotide having a nucleotide sequence as set forth in SEQ ID NO:3 or
a polynucleotide as set forth in nucleic acid residues 1-331, 799-903, 1232-1543, 2147-2486
or 2964-4756 of SEQ ID NO:3.